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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/054,088 | 01/22/2002 | Masaaki Ikeda | 15115.017001 | 3668 |

7590 02/26/2004

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EXAMINER

LAUCHMAN, LAYLA G

ART UNIT

PAPER NUMBER

2877

DATE MAILED: 02/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-----------------|--------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/054,088 | IKEDA ET AL. | |
| | Examiner | Art Unit | |
| | L. G. Lauchman | 2877 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 19-21 is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>8/13/2002</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-18 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-6, 8, 20, 16, 18, 20, 22, 24, 25 of copending Application No. 10/092,336 in view of Nakamura Ryuichi (JP 2000-348607).

This is a provisional obviousness-type double patenting rejection.

As to Claims 1 and 2, Claims 1 of Application '336 teaches a manufacturing method of an optical device, comprising: preparing a die unit, an outer surface of which has a micro-asperity pattern (2nd limitation); preparing a substrate that is coated with a thin resin film (1st limitation); forming a micro-asperity pattern on the thin film resin by pressing the die unit against the resin film, wherein the temperature of a room is set lower than a melting temperature (1st limitation).

Claim 1 of Application '336 lacks the die being cylindrical and holding the substrate by a transfer stage. Nakamura teaches a thick-film pattern method utilizing a roll press (cylindrical) (Fig. 5) to arrange a pattern of predetermined configuration by pressing against the thick-film material.

It would have been obvious to modify Claim 1 of Application '336 as taught by Nakamura to have a cylindrical shape of the die, since it would provide uniform distribution of the pattern. As to the transfer stage, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide a transfer stage to hold the substrate since the substrate must be supported or held by a stage in order to be processed.

As to Claims 3-9, Claims 2, 3, 4, 5, and 6 of Application '336 teach all as applied to Claim 1, and in addition the step of repeating the operation of rolling the die unit on the film, the step of adjusting an angular deviation between the substrate and the die, the micro-asperity pattern is formed on the thin resin film in an inert gas atmosphere, the resin film is made of a thermoplastic material, the die unit has a portion having an alignment mark that will serve as a positional reference.

As to Claim 10, Claim 8 of Application '336 teaches a manufacturing device, comprising: a transfer stage for holding a substrate that is coated with a thin resin film; a die unit, which formed with a micro-asperity pattern; a moving mechanism for moving the transfer stage; a pressurizing mechanism for pressing the die against the resin; a micro-asperity pattern is formed on the resin.

Claim 8 of Application'336 lacks the die being cylindrical. Nakamura teaches a thick-film pattern method utilizing a roll press (cylindrical) (Fig. 5) to arrange a pattern of predetermined configuration by pressing against the thick-film material.

It would have been obvious to modify Claim 8 of Application '336 as taught by Nakamura to have a cylindrical shape of the die, since it would provide a uniform distribution of the pattern.

As to Claims 11-17, Claims 16,18, 20, 10, 22, 24, and 25 teach everything as applied to Claim 8 of Application, in addition the die unit comprises a stamper member, an elastic member, a heating unit for heating the die unit and the transfer stage, a rotation axis direction moving mechanism, a rotary mechanism, one alignment mark observation optical device provided in the pressurizing mechanism, and one alignment mark observation optical device provided under the substrate.

As to Claim 18, Claim 25 of Application'336 teaches a manufacturing apparatus of an optical device, comprising: a transfer stage; a die having a micro-asperity pattern; a pressuring mechanism for pressing the die against the resin; a moving mechanism for moving one of the transfer stage and the die unit;; an airtight chamber for accommodating at least the transfer stage , the die unit, the pressurizing mechanism, and the moving mechanism; and exhausting means for exhausting a gas from the airtight chamber prior to an operation.

Claim 25 of Application'336 lacks the die being cylindrical. Nakamura teaches a thick-film pattern method utilizing a roll press (cylindrical) (Fig. 5) to arrange a pattern of predetermined configuration by pressing against the thick-film material.

It would have been obvious to modify Claim 25 of Application '336 as taught by Nakamura to have a cylindrical shape of the die, since it would provide a uniform distribution of the pattern.

Allowable Subject Matter

Claims 19-21 are allowed.

The following is an examiner's statement of reasons for allowance:

As to Claim 19, the prior art of record taken along or in combination, fails to disclose or render obvious an alignment mark that will serve as a positional reference when an optical component is disposed at a prescribed position with respect to the substrate, the micro-asperity and the alignment mark being formed by rolling, on an original resin film, a cylindrical die unit, in combination with the rest of the limitations of the claim.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Papers related to this application may be submitted to Technology Center 2800 by facsimile transmission. Papers should be faxed to TC 2877 via the PTO Fax Center located in CP4-4C23. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The CP4 Fax Center number is (703) 872-9306.

Art Unit: 2877

If the Applicant wishes to send a Fax dealing with either a Proposed Amendment or for discussion for a phone interview then the fax should:

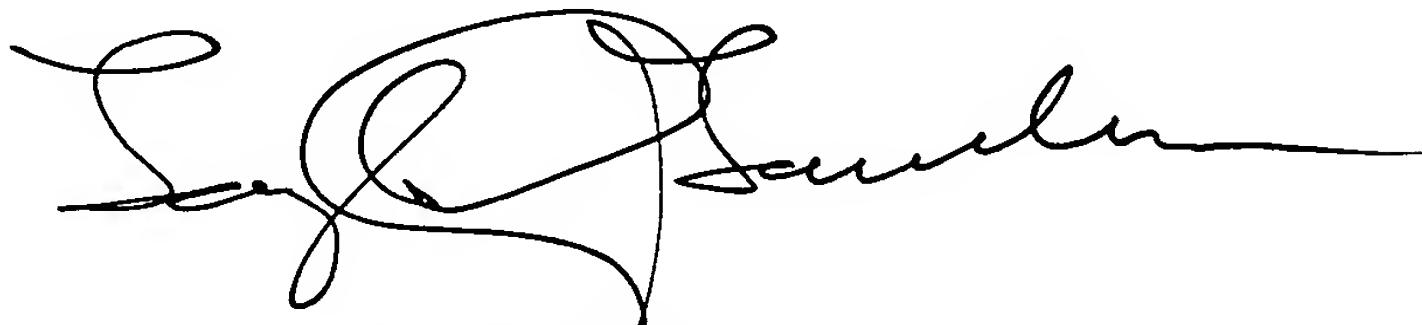
a) Contain either the statement "DRAFT" or "PROPOSED AMENDMENT" on the Fax Cover Sheet; and

b) Should be unsigned by the attorney or agent.

This will ensure that it will not be entered into the case and will be forwarded to the examiner as quickly as possible.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to L. G. Lauchman whose telephone number is (571) 272-2418.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC receptionist whose telephone number is (571) 272-1562.

A handwritten signature in black ink, appearing to read 'L. G. Lauchman', with a long horizontal flourish extending to the right.

L. G. Lauchman
Patent Examiner
Art Unit 2877
2/16/04/lgl